

### REMARKS

This is in response to the Non-Final Office Action mailed on May 31, 2007 which reopened prosecution and set forth a new ground of rejection. With this Amendment, claims 1, 18 and 34 are amended to address the new grounds of rejection. Reconsideration and allowance of pending claims 1, 3-18, 20-34 and 36-39 are respectfully requested in view of the amendments and the following comments.

### Claims

Independent claim 1 recites a method of providing Resource-Event-Agent (REA) model based security. The method includes the steps of “identifying an REA defined association of a type which dictates ownership between a first object and a second object in an REA model;” “creating an association class object for the REA defined association between the first object and the second object, the association class object having properties defining security between the first object and the second object;” and “storing the association class object on a tangible computer readable medium for use in providing security between the first object and the second object.” Independent claim 18 recites a computer readable medium with similar limitations. Independent claim 34 recites a system, embodied in a computing device, for providing security. The system of claim 34 also includes similar limitations. System claim 34 includes “a Resource-Event-Agent (REA) model stored on a tangible computer readable medium and configured to implement a first object, a second object, and an REA defined association of a type which dictates ownership between the first object and the second object.” The system of claim 34 also includes “a security model stored on the computer readable medium and configured to implement an association class object for the REA defined association between the first object and the second object in the REA model, such that properties of the association class object define security between the first object and the second object.”

*Claim Rejections -35 U.S.C. § 101*

In sections 5 of the Office Action, claims 18 and 20-33 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. In rejecting claims 18 and 20-33, the Office Action stated:

Claim 18 is not limited to tangible embodiments. In view of applicants' disclosure, specification page 9, line 26, through page 10, line 19, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., RAM, ROM, flash memory) and intangible embodiments (e.g., carrier waves, wireless media). As such, the claim is not limited to statutory subject matter and is therefore non-statutory. Claims 20-33 are dependent upon claim 18 and therefore inherit its deficiencies.

Without prejudice on the issue of whether claims 18 and 20-33 already satisfy the requirements of 35 U.S.C. § 101, with this Amendment, independent claim 18 is amended to more clearly direct the rejected claims to statutory subject matter. As amended, claim 18 is now directed to a tangible computer readable medium, and includes the step of "storing the association class object on the tangible computer readable medium for use in providing security between the first object and the second object." Therefore, the medium is now clearly limited to tangible embodiments, and it is respectfully requested that the rejection of claims 18 and 20-33 in section 5 of the Office Action be withdrawn.

In section 6 of the Office Action, claims 1, 3-18, 20-34, and 36-39 were rejected under 35 U.S.C. § 101 as lacking patentable utility. In rejecting claims 1, 3-18, 20-34, and 36-39, the Office Action stated:

Claims 1, 18, and 34 lack a concrete, tangible result. Claim 1 recites a method, however the method lacks a useful, tangible concrete result. The final output of the method is the creation of an association object, which is an abstract idea. It therefore fails to produce a tangible, real-world result, Claim 18 is similar to claim 1.

Claim 34 recites a system, however the components of the "system" are an REA model and a security model. These models are at best, functional descriptive material. Note MPEP 2106.01 for guidance on computer related non-statutory subject matter.

Claims 3-17, 20-33, and 36-39 are dependent upon claims 1, 18, and 34, and therefore inherit their deficiencies.

Without prejudice on the issue of whether claims 1, 3-18, 20-34, and 36-39 already satisfy the requirements of 35 U.S.C. § 101, with this Amendment, independent claims 1, 18 and 34 are amended to more clearly satisfy patentable utility requirements of 35 U.S.C. § 101. As noted above, independent claim 1 now includes the limitation of “storing the association class object on a tangible computer readable medium for use in providing security between the first object and the second object.” Storing a result (e.g., the created association class object which is used to provide security) on a tangible computer readable medium is a useful, tangible and concrete result, and not merely an abstract idea. Therefore, it is respectfully requested that the rejection of claims 1 and 3-17 under 35 U.S.C. § 101 is section 6 of the Office Action be withdrawn.

Similarly, independent claim 18 is amended to include the step of “storing the association class object on the tangible computer readable medium for use in providing security between the first object and the second object.” Again, this constitutes a useful, tangible and concrete result, and not merely an abstract idea. Therefore, it is respectfully requested that the rejection of claims 18 and 20-33 under 35 U.S.C. § 101 is section 6 of the Office Action be withdrawn.

Independent claim 34 is herein amended to be directed to a system, embodied in a computing device, for providing security. As amended, the recited Resource-Event-Agent (REA) model and the security model are also explicitly stored on a tangible computer readable medium. Therefore, these claim elements are not merely functional descriptive material, but represent structural claim elements which clearly allow system claim 34 to satisfy the requirements of 35 U.S.C. § 101. Therefore, it is respectfully requested that the rejection of claims 34 and 36-39 under 35 U.S.C. § 101 is section 6 of the Office Action be withdrawn.

*Claim Rejections -35 U.S.C. § 103*

In section 7 of the Office Action, claims 1, 3-18, 20-34 and 36-39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boozer et al. (U.S. Patent Pub. No. 2004/0205355 A1)

in view of Tingey (U.S. Patent Pub. No. 2004/0133583). In support of the rejection under 35 U.S.C. § 103(a), the Office Action stated that Boozer et al. (hereafter Boozer) teach “a method/system/computer readable medium for providing Resource-Event-Agent (REA) model based security.” More specifically, the Office Action stated that Boozer teach the steps of “[i]dentifying an REA defined association of a type which dictates ownership between a first object and a second object,” and “[c]reating an association class for the REA defined association between the first object and the second object, the association class defining security between the first object and the second object.” The assertion that Boozer teaches these steps is respectfully traversed.

In support of this traversal, it is noted that, also in section 7 of the Office Action, the Examiner again also acknowledges that Boozer does not teach each of these steps. Specifically, the Office Action states that Boozer “does not specifically teach REA models and wherein creating the association class object for the association between the first object and the second object further comprises creating an association class object having properties defining security between the first object and the second object.” In fact, however, since Boozer does not teach REA models, REA defined associations of types which dictate ownership, and/or association class objects for the REA defined associations between objects, this reference actually fails to teach or suggest either of the steps of method claim 1. The same is true for the corresponding limitations in computer-readable medium independent claim 18 and system claim 34.

The shortcomings of Boozer in satisfying a *prima facie* conclusion of obviousness against the pending claims are also not overcome by Tingey. The Office Action asserts that Tingey teaches REA models and the limitation of creating association class objects for an association between the first object and the second object, with the association class object having properties defining security between the first object and the second object. Specifically, the Office Action references paragraph 0066 of Tingey as providing such a teaching. These assertions regarding the disclosure of Tingey are respectfully traversed as well.

Tingey teach a record-extensible event accounting structure or approach which is compatible with the resource, event and agent orientation of the REA model. See for example, Tingey at paragraphs 0009, 0059 and 0060. As such, Tingey makes general references to REA

models and some aspects of REA model structure. However, like Boozer, Tingey does not teach the step of “creating an association class object for the REA defined association between the first object and the second object, the association class object having properties defining security between the first object and the second object,” which is recited in independent claims 1 and 18. Nor does Tingey teach the similar limitation in independent system claim 34 of “a security model . . . configured to implement an association class object for the REA defined association between the first object and the second object in the REA model, such that properties of the association class object define security between the first object and the second object.” In fact, the Tingey publication does not show, discuss, or make any reference to association class objects for REA defined associations between a first object and a second object. Without teaching the association class object recited in the rejected claims, it is not possible for Tingey to teach that the association class object has properties defining security between the first and second objects, as is also specifically required in each of the rejected claims.

In paragraph 0066 of Tingey, which was cited by the Office Action as teaching association class objects and the definition of security using association class objects, no such teaching is actually provided. Paragraph 0066 of Tingey states that:

Security and stability of data in the proposed architecture are factors in the selection of standardized event summary and detail records. Of course, a record-extensible structure, such as is described herein, is possible only through use of classification and hierarchy establishing tools and concepts along with relational models. Use of both kinds of models are critical to successful implementation of a functional security model. By definition, security itself is a hierarchical phenomenon, namely that rights are granted to individuals and organizations based on some form of classification. Thus, an approach based on hierarchic as well as relational structures is viable to the degree that such tree-based classification systems are available to secure and to organize the data. As an example of how such a record-extensible environment functions, three composite “Big E” events are outlined.

While Tingey does briefly mention the general concept of “security”, this reference does not teach or suggest that security between a first object and a second object is defined in an association class object created for an REA defined association between the first and second object. Instead, Tingey

only state that security is based upon granting rights to individuals and organizations based some form of classification using tree-based classification systems.

As is well established, the Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the Examiner does not produce a *prima facie* case, the Applicant is under no obligation to submit evidence of nonobviousness.” See MPEP § 2142. “To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.” (Emphasis added). See MPEP § 2142.

It has been shown that neither of Boozer or Tingey teach or suggest the limitation found in independent claims 1 and 18 of “creating an association class object for the REA defined association between the first object and the second object, the association class object having properties defining security between the first object and the second object.” Using the same analysis, it has been shown that neither of Boozer or Tingey teach or suggest the claim limitation found in independent claim 34 of “a security model . . . configured to implement an association class object for the REA defined association between the first object and the second object in the REA model, such that properties of the association class object define security between the first object and the second object.” Since the combination of Boozer and Tingey do not teach or suggest all of the claim limitations, a *prima facie* case of obviousness has not been established for any of the independent or dependent claims, and the rejection of all pending claims should be withdrawn. Additionally, the dependent claims are believed to contain additional limitations which are neither taught or suggested by either of Boozer or Tingey. Consequently, it is respectfully submitted that independent claims 1, 18 and 34 are in allowable form, along with dependent claims 3-17, 20-33, and 36-39. It is therefore respectfully requested that the rejection of all pending claims under 35 U.S.C. § 103 in section 7 of the Office Action be withdrawn.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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